

**ABSTRACT OF THE DISCLOSURE**

A position measuring apparatus, for use in an assisting apparatus for surgical operations, comprises a position indicating means for indicating a position and a direction of a tool, and  
5 a three-dimensional position measuring means for measuring a position and a direction of a surgical field and also the position and the direction of the tool. The position indicating means and the three-dimensional position measuring means are unified in one body in the relative position thereof, so that a position for  
10 assistance of surgical operation is indicated in the form of an intersection line or an intersection point of the laser beams, irrespective of the position of the position measuring apparatus.